

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An assembly comprising:
a display device provided with a pattern of pixels driven by a control circuit, and
an illumination system for illuminating the display device,
said illumination system comprising a light-emitting panel and at least one light source, said light source being associated with the light-emitting panel, the light-emitting panel capable of providing light to the display device, wherein:
the light source comprises at least three sets of light-emitting diodes, wherein each set of light-emitting diodes has a different light-emitting wavelength, and
the control circuit also drives luminous fluxes of the light-emitting diodes in dependence upon an image to be displayed by the

display device so that a contrast of the image to be displayed is minimally affected.

2. (Previously Presented) An assembly as claimed in claim 1, wherein the control circuit varies an intensity of light emitted by each set of the light-emitting diodes in response to an illumination level of the image to be displayed by the display device.

3. (Previously Presented) An assembly as claimed in claim 1, wherein the intensity of the light emitted by each set of the light-emitting diodes can be adjusted on a frame-to-frame basis.

4. (Previously Presented) An assembly as claimed in claim 1, wherein the intensity of the light emitted by each set of the light-emitting diodes can be adjusted for each color on a frame-to-frame basis.

5. (Previously Presented) An assembly as claimed in claim 1, wherein the light source comprises at least four sets of light-

emitting diodes, wherein each set of light-emitting diodes has a different light-emission wavelength.

6. (Previously Presented) An assembly as claimed in claim 1, wherein each diode in each set of the light-emitting diodes has a luminous flux of at least five lumens.

7. (Previously Presented) An assembly as claimed in claim 6, wherein each set of the light-emitting diodes is mounted on a printed circuit board.

8. (Currently Amended) A display device for use with an illumination system, the illumination system comprising a light-emitting panel and at least one light source, the light source being associated with the light-emitting panel and comprising at least three sets of light-emitting diodes, each set of light-emitting diodes having a different light-emission wavelength, the display device comprising:

a pattern of pixels capable of receiving light from the light-emitting panel in the illumination system; and

a control circuit operable to drive the pixels, the control circuit also operable to drive luminous fluxes of the light-emitting diodes in dependence upon an image to be displayed by the display device so that a contrast of the image to be displayed is minimally affected.

9. (Currently Amended) An illumination system for use with a display device, the display device provided with a pattern of pixels driven by a control circuit, the illumination system for illuminating the display device and comprising:

a light-emitting panel; and

at least one light source associated with the light-emitting panel;

wherein the light source comprises at least three sets of light-emitting diodes, each set of light-emitting diodes having a different light-emission wavelength, the light-emitting panel capable of providing light to the display device; and

wherein the control circuit is operable to drive luminous fluxes of the light-emitting diodes in dependence upon an image to be displayed by the display device so that a contrast of the image

to be displayed is minimally affected.

10. (Previously Presented) An assembly as claimed in claim 1, wherein a first set of light-emitting diodes has a red light-emission wavelength, a second set of light-emitting diodes has a green light-emission wavelength, and a third set of light-emitting diodes has a blue light-emission wavelength.

11. (Previously Presented) An assembly as claimed in claim 2, wherein a first set of light-emitting diodes has a red light-emission wavelength, a second set of light-emitting diodes has a green light-emission wavelength, and a third set of light-emitting diodes has a blue light-emission wavelength.

12. (Previously Presented) An assembly as claimed in claim 2, wherein the intensity of light emitted by each set of the light-emitting diodes can be adjusted on a frame-to-frame basis.

13. (Previously Presented) An assembly as claimed in claim 2, wherein the intensity of light emitted by each set of the light-

emitting diodes can be adjusted for each color on a frame-to-frame basis.

14. (Previously Presented) An assembly as claimed in claim 5, wherein a first set of light-emitting diodes has a red light-emission wavelength, a second set of light-emitting diodes has a green light-emission wavelength, a third set of light-emitting diodes has a blue light-emission wavelength, and a fourth set of light-emitting diodes has an amber light-emission wavelength.

15. (Previously Presented) An assembly as claimed in claim 2, wherein each diode in each set of the light-emitting diodes has a luminous flux of at least five lumens (5 lm).

16. (Previously Presented) An assembly as claimed in claim 15, wherein each set of the light-emitting diodes is mounted on a printed circuit board.

17. (Currently Amended) A display device for use with an illumination system, the illumination system comprising a light-

emitting panel and at least one light source, the light source being associated with the light-emitting panel and comprising at least three sets of light-emitting diodes, each set of light-emitting diodes having a different light-emission wavelength, the display device comprising:

a pattern of pixels capable of receiving light from the light-emitting panel of the illumination system; and

a control circuit operable to drive the pixels, the control circuit also operable to drive luminous fluxes of the light-emitting diodes in dependence upon an image to be displayed by the display device so that a contrast of the image to be displayed is minimally affected;

wherein the control circuit is operable to vary an intensity of light emitted by each set of the light-emitting diodes in response to an illumination level of the image to be displayed by the display device.

18. (Previously Presented) A display device as claimed in claim 17, wherein the light source comprises at least four sets of light-emitting diodes, wherein each set of light-emitting diodes

has a different light-emission wavelength.

19. (Currently Amended) An illumination system for use with a display device, the display device provided with a pattern of pixels driven by a control circuit, the illumination system for illuminating the display device and comprising:

a light-emitting panel; and

at least one light source associated with the light-emitting panel;

wherein the light source comprises at least three sets of light-emitting diodes, each set of light-emitting diodes having a different light-emission wavelength, the light-emitting panel capable of providing light to the display device; and

wherein the control circuit is operable to drive luminous fluxes of the light-emitting diodes in dependence upon an image to be displayed by the display device so that a contrast of the image to be displayed is minimally affected; and

wherein the control circuit is further operable to vary an intensity of light emitted by each set of the light-emitting diodes in response to an illumination level of the image to be displayed

by the display device.

20. (Previously Presented) An illumination system as claimed in claim 19, wherein the light source comprises at least four sets of light-emitting diodes, wherein each set of light-emitting diodes has a different light-emission wavelengths.

21. (New) The assembly of claim 1, wherein the control circuit is influenced by sensor that measures ambient light.

22. (New) The assembly of claim 1, wherein the display device includes liquid crystal elements, and wherein a change of color is unlinked from the liquid crystal elements and is delegated to the illumination system.

23. (New) The assembly of claim 1, wherein a display control of the control circuit for controlling the display device is unlinked from an illumination control of the control circuit for controlling the illumination system.

24.(New) The assembly of claim 1, wherein the control circuit is configured to control at least one of color and intensity of the image to be displayed by controlling the illumination system, the control circuit being further configured to adjust transmission factors of the pixels of the display to increase the contrast.